

United States Government

Department of Energy

Office of River Protection

memorandum

DATE:

JUN 01 2001

REPLY TO

ATTN OF:

BMA:PLM 01-BMA-035

SUBJECT:

FISCAL YEAR (FY) 2003 BUDGET SUBMISSION FOR THE U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP)

TO: Carolyn L. Huntoon, Acting Assistant Secretary
for Environmental Management, EM-1, HQ

- References:
1. Headquarters' electronic mail message from E. B. Bronstein to distribution, "FY 2003 Budget Formulation Guidance," dated April 13, 2001
 2. Headquarters' electronic mail message from E. B. Bronstein to distribution, "Clarification – FY 2003 Budget Formulation Guidance," dated May 2, 2001
 3. Headquarters' memorandum from M. W. Frei to H. L. Boston, ORP, etal, "FY 2003 Budget Preparations," dated May 3, 2001
 4. Headquarters' memorandum from R. G. Lightner to K. R. Ensign, ORP, "U.S. Department of Energy, Office of River Protection (ORP), Baseline Change Proposal (BCP) for Formulation of the Fiscal Year (FY) 2003 Field Budget Request," dated May 7, 2001
 5. State of Washington Department of Ecology letter from M. Wilson to J. E. Rasmussen, ORP, "Disapproval of U.S. Department of Energy (DOE) Hanford Federal Facility Agreement and Consent Order (HFFACO) Change Requests M-45-01-01, M-62-01-02, and M-90-01-01, all dated May 2, 2001", dated May 16, 2001

Attached are selected budget submission deliverables and supplemental information for ORP's FY 2003 budget request. These deliverables are consistent with the information being submitted electronically to you through the Integrated Planning, Accountability, and Budgeting System (IPABS).

As you know, since FY 2003 budget allocations by site have not been determined, the FY 2003 budget request was developed around several cases. References 1 and 2 requested the following cases:

- Case 1 – equal to the FY 2002 Congressional Budget Request;
- Case 2 – equal to the FY 2001 appropriation; and,
- Case 3 – funding necessary to meet full requirements for FY 2003

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In addition to the above cases, Reference 3 requested preparation of a Case 1B that would reflect level funding equal to the FY 2002 Congressional Budget Request, but is risk-based instead of compliance driven. For ORP, this case would be the same as Case 1, as our highest risk issues are also tied to compliance commitments.

For the purposes of this budget request, ORP is submitting the funds required to support our legal commitments under the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement [TPA]), where technically achievable, and assuming the changes we have proposed to the TPA M-62 milestones associated with the Waste Treatment and Immobilization Plant (WTP). ORP prepared the FY 2003 budget based on the proposed changes to the TPA M-62 milestones because M-62-06 (start Phase 1 construction by July 31, 2001) is no longer technically achievable as a result of dismissal of the privatization contractor and unavoidable delays necessary to award a new WTP contract under competitive Federal Procurement rules. It should be noted that the proposed changes to the M-62 milestones were disapproved by the Washington State Department of Ecology on May 16, 2001 (Reference 5).

The FY 2003 funding amount being requested is \$1.365 billion. The FY 2003 funding request represents the cost of performing the scheduled work scope; i.e., contractually committed cost efficiencies have not been assumed.

Per the note from Ralph Lightner on May 7, 2001 (Reference 4), ORP did attempt to input the FY 2003 request in the proposed new Project Baseline Summary (PBS) structure. However, due to a limitation in IPABS and because the new structure has not been formally approved yet, we could only input a portion of the FY 2003 request in the new structure. We have attached a crosswalk (Attachment 3) to identify what is in IPABS compared to the proposed new PBS structure.

To supplement the deliverables submitted via the IPABS database, the following are provided as attachments to this memorandum. Attachment 1 contains work scope descriptions of each activity on the priority listing. Attachment 2 is a detail description by PBS of the FY 2003 budget request. Attachment 3 provides a PBS crosswalk between the requested structure and IPABS data entry. Attachment 4 is a letter from the State of Washington Department of Ecology to Harry Boston and Keith Klein regarding our FY 2002 and FY 2003 budget briefings. This letter is provided to you to meet requirements of TPA Paragraph 149, Section C, whereby DOE is required to submit to DOE Headquarters any unresolved issues raised by Ecology and the Environmental Protection Agency with regard to our FY 2003 budget request. Attachment 5 is a Summary of the Budget Cases. Attachment 6 provides a summary of comments received from the FY 2003 public meetings.

Carolyn L. Huntoon
01-BMA-035

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If you have any questions, please contact me, or your staff may contact Jennifer L. Sands,
Office of Business and Administration, (509) 373-4300.



Harry L. Boston
Manager

Attachments (6)

cc w/attach:

Regulators/Community

T. C. Fitzsimmons, Ecology
D. J. Silver, Ecology
M. A. Wilson, Ecology
C. Clark, EPA
M. F. Gearhead, EPA
D. R. Sherwood, EPA
T. Martin, HAB

Hanford Contractors

M. P. Delozier, CHG
T. Taylor, CHG
R. Naventi, BNI
W. Wagner, BNI

DOE HQ

M. W. Frei, EM-40
R. G. Lightner, EM-44
S. P. Schneider, EM-44
C. S. Trischman, EM-44
E. B. Bronstein, EM-23
B. A. Gaffney, EM-23

**OFFICE OF RIVER PROTECTION
PROJECT PRIORITY LIST**

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Priority	PBS Number	WBS Number	DESCRIPTION	FY 2003 Request
1	ORP-TW03	1.01.01.01.01	Operate Single-Shell Tanks	11,268
2	ORP-TW03	1.01.01.01.02	Maintain Single-Shell Tanks	2,830
3	ORP-TW03	1.01.01.01.03	Single-Shell Tank Safety & Technical Issue	2,204
4	ORP-TW03	1.01.01.01.04	Single-Shell Tank Facility Upgrades	959
5	ORP-TW03	1.01.01.01.05	Essential Services - Operations & Maintenance Single-Shell Tanks	471
6	ORP-TW03	1.01.01.02.01	Operate Double-Shell Tanks	42,556
7	ORP-TW03	1.01.01.02.01.02	Transfer & Tank Space Operations	2,754
8	ORP-TW03	1.01.01.02.02	Maintain Double-Shell Tanks	16,819
9	ORP-TW03	1.01.01.02.06	Capacity & Inventory Management	26,868
10	ORP-TW03	1.01.01.02.07	Essential Services - Operations & Maintenance Double-Shell Tanks	6,782
11	ORP-TW10	1.01.06.01	Project Execution & Control	59,149
12	ORP-TW10	1.01.06.02	Environmental, Safety, Health & Quality	2,907
13	ORP-TW10	1.01.06.03	Business & Administration	57,190
14	ORP-TW03	1.01.01.A	Store Waste - Support to ORP	1,820
15	ORP-TW10	1.01.06.A	Manage Project - Support to ORP	2,238
OPERATE AND MAINTAIN TANK FARMS				236,815
16	ORP-TW03	1.01.01.03.02	Tank Farm Stabilization	17,554
MAINTAIN INTERIM STABILIZATION SCHEDULE				17,554
17	ORP-TW03	1.01.01.02.04	Tank Integrity Assessment	6,430
DOUBLE-SHELL TANK INTEGRITY PROGRAM				6,430
18	ORP-TW03	1.01.01.02.05	Double-Shell Tank Facility Upgrades	3,027
DOUBLE-SHELL TANK FARM COMPLIANCE UPGRADES				3,027
19	ORP-TW12	1.01.02.02.03	Construct Double-Shell Tank Transfer System - Project W-314	4,339
20	ORP-TW12	1.01.02.02.03L	Construct Double-Shell Tank Transfer System - Project W-314 Line Item	31,925
21	ORP-TW06LT	1.01.04.BE	Waste Treatment Plant Construction	898,200
22	ORP-TW06LT	1.01.03.01.02.02	Infrastructure Services - Phase I	7,545
23	ORP-RG01	1.01.04.RE	Office of Safety Regulation	4,179
24	ORP-TW06LT	1.01.03.A	Treat Waste - Support to ORP	31
25	ORP-TW12	1.01.02.02.02	DST Initial Tank Retrieval & Waste Feed Delivery System - Proj W-211/W-521	2,625
26	ORP-TW12	1.01.02.02.02.L	DST Initial Tank Retrval & Waste Feed Delivry Sys - Proj W-211/W-521 Line Item	26,300
27	ORP-TW04	1.01.02.02.02.04	Double-Shell Tank Retrieval	21,458
28	ORP-TW04	1.01.02.02.05	Essential Services - Double-Shell Tanks	19,742
29	ORP-TW04	1.01.02.A	Retrieve Waste - Support to ORP	4,296
30	ORP-TW09	1.01.04.01.01	Immobilized Low Activity Waste Disposal Facility - Project W-520	1,143
31	ORP-PED	1.01.04.01.01.L	Immobilized Low Activity Waste Disposal Facility - Proj W-520 Line Item	4,024
32	ORP-TW09	1.01.04.01.04	Essential Services to Dispose Immobilized Low Activity Waste	4,104
33	ORP-TW09	1.01.04.02.01	Immobilized High Level Waste Disposal Facility - Proj W-464	1,714
34	ORP-PED	1.01.04.02.01.L	Immobilized High Level Waste Disposal Facility - W-464 Line Item	5,120
35	ORP-TW09	1.01.04.02.01.L	Immobilized High Level Waste Disposal Facility - W-464 Line Item	7,990
36	ORP-TW09	1.01.04.02.05	Essential Services to Store/Prepare Immobilized High Level Waste	1,277
37	ORP-TW09	1.01.04.A	Dispose Waste - Support to ORP	495
WASTE TREATMENT PLANT SCHEDULE DRIVES WASTE FEED DELIVERY AND STORAGE AND DISPOSAL FACILITIES				1,046,507
38	ORP-TW04	1.01.02.01.01	Single-Shell Tank Retrieval & Transfer System Development	20,237
39	ORP-TW04	1.01.02.01.02	Construct Single-Shell Tank Retrieval System	4,823
40	ORP-TW04	1.01.02.02.01	Double-Shell Tank Retrieval & Transfer Systems Development	9,028
41	ORP-TW04	1.01.05.01.01.04	Vadose Zone Monitoring	13,101
42	ORP-TW04	1.01.05.03	Close River Protection Project Facilities	4,687
43	ORP-TW04	1.01.02.02.03.02	Tank Farm Upgrades - Project W-525	3,017
VADOSE ZONE INVESTIGATION, SINGLE-SHELL TANK RETRIEVAL DEMONSTRATIONS				54,893
TOTAL FY 2003 FULL REQUIREMENTS REQUEST				1,365,226

OFFICE OF RIVER PROTECTION FY 2003 PROJECT PRIORITY LIST WORK SCOPE DESCRIPTIONS

1.01.01.01.01 OPERATE SINGLE-SHELL TANKS

This WBS element includes work scope to: 1) Operate Single-Shell Tank (SST) Farms, 2) Remove abandoned equipment, and 3) Reduce contamination zones. It also provides the Management infrastructure for the SST Field Operations and Engineering Management.

Operate Tank Farms - This activity provides resources and materials necessary to operate tank farm complexes. Included activities are facility housekeeping, essential services, delivery and stocking of change trailer laundry/supplies, Facility Excellence Program walk downs, building rent, pest control, vegetation control and performance of farm specific tasks not associated with equipment monitoring. Essential services include water purveyor, fire protection services, heating, ventilation and air conditioning (HVAC) system maintenance, dome elevation surveys, and portable toilets. Additionally, work and costs associated with routine low-level and mixed wastes generated outside of Projects and planned work packages scope are planned and estimated within this WBS Element.

Remove Abandoned Equipment - This activity removes abandoned equipment meeting the compliance requirements of WAC-173-303, Dangerous Waste Regulations. The various tank farms contain equipment that has been contaminated with tank waste and/or radioactive materials that are no longer required. The structural equipment will be characterized, inventoried, and dispositioned as reusable equipment, or waste. Categorized equipment will be dispositioned per the Management of Contaminated Equipment at the Hanford Site and the River Protection Project (RPP) Abandoned Equipment Storage/Disposal Plan. (Above ground, out-of-service contaminated equipment that is not reusable and is inaccessible or difficult to remove [based on risk and cost involved] will be sealed to prevent contamination spread.)

Reduce Contamination Zone - This activity provides a systematic method for implementing a graded approach in characterizing, clean up, and reposting of Farm outdoor areas from a radiological contamination area or a radiological buffer area (RBA). The package uses a graded approach that has areas prioritized to eliminate habitat, reduce access to contaminated components, and performance of necessary surveys and clean up to release identified outdoor areas.

1.01.01.01.02.1 MAINTAIN SINGLE-SHELL TANKS

The scope of work within this element of the work breakdown structure (WBS) consists of preventive and corrective maintenance to provide operable equipment that is calibrated and functionally tested and thus compliant with Authorization Basis (AB) and regulatory requirements. Scope also provides the Management infrastructure for the SST Field Maintenance Management. Specific work scope includes the following:

- Provide administrative and technical support required for the execution of this cope of work.
- Conduct corrective and preventive maintenance.
- Conduct field/shop equipment calibration and testing.
- Procure parts, supplies and equipment.
- Prepare, review, and approve technical work documents that make up maintenance work packages (e.g., Engineering Change Notices (ECN), Unreviewed Safety Question (USQ) screening, Authorization Amendment packages, procedure/data sheet changes, and as low as reasonably achievable [ALARA] reviews).
- Verify work completed and maintenance work package closeout.

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A safe and effective SST Maintenance Program is necessary to support SST Operations, Interim Stabilization (IS), Retrieval and Transfer, and Closure.

1.01.01.01.03 SINGLE-SHELL TANK SAFETY & TECHNICAL ISSUE

The scope of work within this element of the WBS includes resolution of flammability safety issues for the Single-Shell High Priority Watch List Tanks, removal of all SSTs from the Watch List, and closure of the remaining Flammable Gas Unreviewed Safety Questions for the RPP SST system (e.g., catch tanks, waste transfer piping, and waste transfer-associated structures).

SST Technical Baseline Issue Closure activity effort will revise existing dome load analysis models establishing input parameters and sensitivity analyses for soil conditions, degraded concrete properties and thermal conditions. Model analysis shall evaluate input parameters and tank response to overload conditions. An American Concrete Institute (ACI) code check of stresses shall be performed. Final documentation shall be issued after technical peer review and Design Authority authorization to both revise existing analyses and close out corrective actions.

There is a collection of documents that summarize the structural analyses that have been performed for single-shell tanks. These documents comprise part of the structural technical baseline. Errors and omissions were identified in this documentation for loads upon SSTs. These omissions had a potentially more serious impact on operational controls in the past since the documentation represented the sole analysis of record, and were the primary bases for selection of safety requirement controls.

Current Technical Safety Requirements (TSRs) controls are based upon a different analysis, which deals solely with hazards to onsite workers and the public from dome collapse. Though adequate controls bound safety analysis hazards, additional conservative controls are required to dome loading approval processes to minimize the risk of structural damage and environmental releases. This activity will qualify whether the current conservatism in the controls is necessary or inadequate.

1.01.01.01.04 SINGLE-SHELL TANK FACILITY UPGRADES

The scope of work within this element of the WBS includes activities required for improved safety, operating efficiency and compliance of structures; systems and components to meet SST mission needs. The focus of the element is to ensure long-term viability of the SST system. The major elements of this WBS include Design, Planning, Procurement, Installation and Closeout. Detail activities include the development of, but not limited to the following activities.

- Engineering Task Plans
- Update Technical baseline information as required, incorporation of work complete ECNs
- Design reconstitution to maintain design bases through the project life cycle
- Configuration discrepancy resolution
- Design, including equipment labeling
- Work Planning
- Procurement, i.e., Bill of Material, Purchase Requisitions, Purchase Orders for material and services, etc.
- Fabrication, i.e., shop work, design build, plant forces, contracted, etc.
- Installation, fieldwork
- Testing
- Turnover to facility operations, readiness activities, training, field verifications, punch list items, acceptance for beneficial use, Authorization Basis, etc.
- Closeouts of documentation, i.e., incorporation of work complete ECN against drawings, closeout of work packages.

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1.01.01.01.05 ESSENTIAL SERVICES – OPERATIONS & MAINTENANCE SINGLE-SHELL TANKS

The work scope in this WBS element provides the Program Management infrastructure for the Operations and Maintenance of SST facilities, the Environmental, Safety, Health and Quality (ESH&Q) Assurance support for the Operations and Maintenance of SST facilities, including the following:

- Provide Engineering Program Management and General Engineering Administration Support.
- Provide Operations Program Management and General Engineering Administration Support.
- Provide management direction and implementation of productivity initiatives to improve cost/schedule performance.
- Provide Baseline Controls Administration Support
- Provide Planning Support
- Provide SST change control administration
- Performance reporting for SST projects
- Provide Corrective Action Management Program support to ensure that SST quality problems are prevented and detected. Institutionalizes continuous quality improvement methodology in activities and products. The management system established includes internal/external deficiency identification, control, correction, tracking, closure, and performance data analysis.
- Provide Radiological Control Improvement Plan support to sustain, improve, and enhance a fundamentally sound radiological control program that ensures the health and safety of all employees and members of the public.

Additional work scope in this WBS element provides for training, document control, Office of River Protection (ORP) support, Infrastructure services, and patrol rover support.

1.01.01.02.01 OPERATE DOUBLE-SHELL TANKS

This WBS element provides activities necessary to operate the Tank Farm facilities within the 200 East and West Area, except those activities concerning waste transfer operations, maintenance or facility upgrades. Specific activities within the scope of this WBS element are:

- Establish and maintain regulatory compliance for facilities.
- Develop and maintain an integrated schedule of activities to be performed within the facilities
- Review work to be performed in the facilities to ensure that no conflict will occur between activities and release the work to be performed
- Procure spare parts for the double-shell tank (DST) facilities to ensure rapid repair of essential equipment.
- Procure supplies necessary to operate and maintain the facilities.
- Perform operating function necessary for routine access to the facilities (i.e. deliver and stock laundry, control access to facilities.
- Reduce contamination zones for facilities.

This WBS element provides the surveillance, emergency response and procedures used for the compliance to the TSRs. This WBS element does not provide activities that are conducted to support a specific tank farm or small group of tank farms. Specific activities within the scope of this WBS element are:

- Emergency Preparedness, associated activities, and general administrative support including conducting drills
- Manage, maintain, and control operating procedures, and support Computer Automated Surveillance System (CASS)/Tank Monitor and Control System (TMACS)/Surveillance Analysis Computer System (SACS)
- Provide Basis for Interim Operations (BIO)/Emergency Response Staffing
- Perform operational surveillances including those for compliance to the Technical Safety Requirements
- Perform routine Radiological Surveillances necessary for compliance to 10CFR 835 and the Tank Farm Radiological Control.

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The scope of work includes addressing of flammable gas issues in support of double-shell tank operations, removal of all DSTs from the Watch List, and support for the maintenance and updates of the Authorization Basis for Tank Farms.

1.01.01.02.01.02 TRANSFER AND TANK SPACE OPERATIONS

This WBS element provides activities necessary to establish routes and transfer waste within the double shell tank system including the receipt of waste from other site facilities. Specific activities within the scope of this WBS element are:

- Establish routes for the receipt and transfer of waste between double shell tanks. This includes jumper changes in pits and setting valves in preparation to transfer or receive waste.
- Perform the operations necessary to transfer waste, perform surveillances during the transfer and receipt of waste, and perform post transfer, line flushes as needed.
- Fabricate and maintain piping jumpers necessary to route waste as needed.
- Performance of waste compatibility analysis to ensure that waste meets the applicable requirements per Administrative control AC. 5.12.
- Perform and document projections of waste received, generated and transferred within the DST system for the purpose of managing tank space.

1.01.01.02.02 MAINTAIN DOUBLE-SHELL TANKS

This WBS element provides all activities necessary to maintain the AY, AZ, AP, AW, and AN Double-Shell Tank Farms and associated facilities, except those activities concerning facility upgrades, or those activities that are considered operations. Specific activities within the scope of this WBS element are:

- Perform preventative and corrective maintenance as needed for Farm Tanks, and other associated facilities.
- Manage, plan, schedule, and prepare for maintenance activities.
- Perform technical baseline and systems analyses of Farm Tanks, and other associated facilities.
- Deactivate AY/AZ Farm Tanks, and other associated facilities.
- Prepare and issue various reports, plans, and other documents as needed.

SY Farm and 200 W DST facility maintenance provides activities necessary to maintain the SY tank farm, 242-S, 244-TX, 244-S and the West area DST transfer system, including Cross-Site Transfer System, and associated facilities, minor facility upgrades (Define minor), but not including those activities that are considered operations. Specific activities within the scope of this WBS element are:

- Perform fieldwork for preventative and corrective maintenance, including calibrations, functional tests, and field supervision.
- Acquire and maintain calibration of Maintenance and Test Equipment.
- Perform planning, procurement, scheduling, and engineering for maintenance activities.
- Excludes preparation and maintenance of procedures.
- Perform engineering evaluation of systems performance.
- Remove & disposition failed or inactive equipment associated with maintenance activities.
- Implement Reliability Centered Maintenance Program.
- Implement Pilot Predictive Maintenance Program for DST Ventilation.

DST waste transfer facility maintenance provides activities necessary to maintain the 204-AR, 244-AR, 244-CR and East area transfer system and associated facilities, except those activities concerning facility upgrades, or those activities that are considered operations. Specific activities within the scope of this WBS element are:

- Perform preventative and corrective maintenance as needed for East area miscellaneous facilities.
- Manage, plan, schedule, and prepare for maintenance activities.
- Perform technical baseline and systems analyses of East Area miscellaneous facilities.
- Deactivate miscellaneous facility systems in East Area.

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- Prepare and issue various reports, plans, and other documents as needed.

1.01.01.02.06 CAPACITY AND INVENTORY MANAGEMENT

This element includes analysis of liquid, vapors, and solid tank material using core, grab, auger, LDUA or other waste tank sampling technique. Work performed will comply with the requirements of the tank sampling and analysis plans (TSAPs) and the Hanford Analytical Services Quality Assurance Requirements Document (HASQARD). Tank specific or project specific final laboratory analysis reports (LARs) will be issued as established by the TSAPs. The routine work scope activities under this WBS element are as follows:

- Sample Receipt (receipt and log-in, chain of custody, control inventory of radio nuclides).
- Hot Cell support (extrude samples, sub-sample, sample prep and radiation control).
- Sample Analysis (analysis, stockroom, & inventory control, standards, radcon support).
- Data Administration and Reporting (QA, Lab IRM systems, Project Coordination, and production control).
- Hazardous Material Controls (liquid waste disposal, solid waste disposal, chemical inventory control).
- Radiological Controls ALARA work practices, authorization basis controls and disposal).
- Issue Laboratory Analysis Report (LAR) as required by TSAP/LOI.
- Technical support for packaging, including safety analysis reports, specific packaging that may require services include the PAS-1, Onsite Transfer Cask, Doorstop Sample Carrier System, and the Sample Pig Transport System.
- Engineering support to maintain equipment in operation, provide minor modifications for effective operation and to provide engineering assistance as necessary for sample trucks, associated ancillary equipment, riser equipment, and special tools.
- Maintenance, inventory, and surveillance of samples currently stored in the 222-S Hot Cells, evaluation of potential sample storage areas, readiness of storage area, transfer of samples to storage, and review of technical basis for storage or disposition of tank samples.
- Management and disposal of waste generated as a result of this activity.
- Laboratory equipment and system software upgrades.

Data analysis encompasses the engineering and scientific activities required to analyze characterization and other data to establish and maintain the tank farm contractor (TFC) waste tank content and capacity for the RPP. The work scope activities included under this WBS element are:

- Prepare Tank Characterization Reports
- Review and evaluate tank characterization data
- Maintain tank waste data management systems (TWINS, PCB, BBI)
- Provide DST waste inventory control authority
- Perform compatibility assessments for DST waste transfers
- Perform tanks space evaluations
- Prepare Waste Tank Summary reports
- Maintain the Hanford Tank Waste Operations Simulator (HTWOS) model
- Prepare Operations and Utilization plans
- Prepare Operational Waste Volume Projections
- Program Management for the RPP Capacity and Inventory Management activities.
- Overall management leadership, direction, vision and integration of RPP Characterization Waste Sampling activities.
- Prepare Technical Sampling Basis and Waste Information Requirement Documents (TSB-WIRD).
- Prepare/Maintain Data Quality Objectives.

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1.01.01.02.07 ESSENTIAL SERVICES – OPERATIONS & MAINTENANCE DOUBLE-SHELL TANKS

The work scope in this WBS element provides the Program Management infrastructure for the Operations and Maintenance of DST facilities, the ESH&Q Assurance support for the Operations and Maintenance of DST facilities, including the following:

- Provide Engineering Program Management and General Engineering Administration Support.
- Provide Operations Program Management and General Engineering Administration Support.
- Provide management direction and implementation of productivity initiatives to improve cost/schedule performance.
- Provide Baseline Controls Administration Support
- Provide Planning Support
- Provide DST change control administration
- Performance reporting for DST projects
- Provide Corrective Action Management Program support to ensure that DST quality problems are prevented and detected. Institutionalizes continuous quality improvement methodology in activities and products. The management system established includes internal/external deficiency identification, control, correction, tracking, closure, and performance data analysis.
- Provide Radiological Control Improvement Plan support to sustain, improve, and enhance a fundamentally sound radiological control program that ensures the health and safety of all employees and members of the public.

Additional work scope in this WBS element provides for training, document control, ORP support, and Infrastructure services.

1.01.06.01 PROJECT EXECUTION AND CONTROL

This work scope assures that engineering principles and processes are applied in the RPP Project in concert with sound engineering and systems engineering practices to develop and maintain a defensible and traceable technical basis for work. This element is to provide management of the engineering program, including those activities provided by the Chief Engineer, direct reporting managers, and technical and administrative staff.

This work scope provides for the maintenance and enhancement of the Integrated Requirements Management System (IRMS) Database, technical expertise for defining a minimal set of requirements, and counsel on requirement implementation.

This work scope also provides the Radioactive Waste Requirements Management (RWRM) Program (formerly the S/RID Program), element assures the implementation of a Configuration Management (CM) program for CHG, element provides Integration support to the ORP in developing and managing the RPP Integrated Baseline, provides Procurement and Contracts work activities for the TFC.

This element provides for all essential operations in support of the CHG Contract. Specific activities are detailed under Operations Monitoring and Response, Operations Data Management and Evaluation, AB Compliance Verification, Safeguards and Emergency Services (Safeguards and Security and Emergency Preparedness/Management) and Event Reporting.

This element provides development, operations, and maintenance of all technical and administrative procedures for the TFC.

This element provides the planning and integration functions for assuring safe tank operations for CHG. It assures achievement of the CHG mission by managing the Conduct of Operations through industry-standard project management

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1.01.06.02 ENVIRONMENTAL, SAFETY, HEALTH & QUALITY

Environmental, Safety, Health, & Quality Assurance provides technical direction for Nuclear Safety & Licensing (NS&L), flammable gas safety issue resolution, criticality safety program, and administration of the Plant Review Committee (PRC). It also provides: 1) the licensing process for the TFC, 2) TFC AB upgrades, 3) the USQ process, and 4) the AB baseline. These activities maintain the nuclear criticality safety program for the Tank Farms facility. Qualified staff are provided to maintain the technical basis for criticality safety, assure incorporation of criticality safety requirements in administrative and technical procedures, support field operations via approval of planned activities and assistance with job-specific training, conduct facility inspections and program assessments, function as point-of-contact for customer inquiries and external assessments.

ESH&Q provides general program management and administration and supports the efforts involved in addressing resolution of quality assurance emerging issues. It also provides the TFC Central RADCON Management program consisting of the following basic elements: Program Management, ALARA programs and the RADCON Improvement Plan Management and Implementation.

1.01.06.03 BUSINESS AND ADMINISTRATION

The work scope activities provide and implement correctly targeted training in accordance with regulatory, company, and customer requirements and in response to identified performance deficiencies.

The work activities provides for Budget Acquisition & Management of the TFC work. The work scope provides business operation services necessary to support the TFC including the operation of the offices of the Chief Financial Officer, Controller, Executive Management, Office of Chief Counselor, Human Resources, Strategic Communications, Information Resource Management (IRM).

The work scope in this WBS element provides fee for the TFC work activities. The fee work scope serves as an administrative placeholder to represent budgeted cost each fiscal year for collection by the TFC(s) as performance incentive fees. Scope also includes management of overheads and Hanford Site Services for the TFC.

1.01.01.A STORE WASTE - SUPPORT TO ORP

This work scope includes: technical analysis of emerging tank farm issues and project support to provide specific expertise in project management, schedules, cost estimates, contingency and risk management, concept development, requirements analysis, and feasibility analysis.

1.01.06.A MANAGE PROJECT – SUPPORT TO ORP

This work scope includes: project support to provide specific expertise in project management, schedules, cost estimates, contingency and risk management, concept development, requirements analysis, and feasibility analysis.

1.01.01.03.02 TANK FARM STABILIZATION

The scope of work within this WBS element includes the field work preparation, operations of the liquid removal equipment, and isolation of tank piping and systems of the 29 SST's not previously stabilized nor isolated and the 11 SSTs that were previously stabilized in the interim stabilization work scope

1.01.01.02.04 TANK INTEGRITY ASSESSMENT

This WBS element provides all necessary activities required to plan and support Tank Integrity Management for Double-Shell Tanks, other catch tanks and facilities (including some double-contained receiver tank [DCRT]), all in accordance with the applicable regulations and approved plans. The work scope includes project management, administrative and technical support for:

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- Tank integrity assessments
- Preparation of an integrity assessment report for the DST System in accordance with WAC 173-303-640(2) and Administrative Orders 00NWPKW-1250 and 00NWPKW-1251
- Generic (not tank-specific) activities supporting DST System integrity assessment (e.g., training and nondestructive examination procedure/operator qualification, services of the independent qualified registered professional engineer)
- Generic (non tank-specific) activities supporting DST caustic addition and waste sampling for corrosion mitigation
- Corrosion mitigation equipment procurement and development
- Nondestructive examination equipment procurement and development
- Video examination of DSTs and exposed piping (in accordance with Administrative Orders 00NWPKW-1250 and 00NWPKW-1251
- Budget and schedule development and support
- Additional scope of work within this element of the WBS is to gather information regarding tank integrity using ultrasonic testing, non-destructive examination, camera and leak testing to satisfy the integrity assessment requirements of WAC 173-303-640(2) and Administrative Orders 00NWPKW-1250 and 1251. Testing will be performed on the 28 double-shell tanks (DST's) and certain DCRTs, catch tanks (CTs), and other miscellaneous tanks.

DST Corrosion Mitigation scope of work is to perform the following:

- Restoration of annulus ventilation
- Mitigation of tanks 241-AY-101, 241-AY-102, 241-AN-102, and 241-AN-107 to within calculated waste chemistry control limits.
- Isolation of the source(s) of water intrusion

The work scope involves the addition of caustic to the DSTs, mixing of the caustic with the existing waste, and performing grab sample and analysis to ensure compliance with waste chemistry specification limits.

The source of possible water intrusion into the tank 241-AY-101 annulus will be investigated and mitigated, if feasible. This scope includes performing a leak inspection of the tank 241-AY-101 raw water lines and performing further investigation of tank corrosion and analysis.

The scope of work within this element of the WBS is to assess the need for DST replacement per Technology Insertion Point T03-05-300 (due April 2005). This assessment will consider waste volume projections, DST-specific waste storage demands based on alternative waste retrieval scenarios, improved estimates of tank life expectancy, and engineering studies on the costs and benefits of providing additional waste storage capacity. Continued ultrasonic testing of DSTs as currently planned will provide the basis for improved estimates of DST life expectancy and refinements in assumed tank failure rates for the annual operational waste volume projections report.

DST Structural analysis scope of work is to assess the need for DST replacement per Technology Insertion Point T03-05-300 (due April 2005). This assessment will consider waste volume projections, DST-specific waste storage demands based on alternative waste retrieval scenarios, improved estimates of tank life expectancy, and engineering studies on the costs and benefits of providing additional waste storage capacity. Continued ultrasonic testing of DSTs as currently planned will provide the basis for improved estimates of DST life expectancy and refinements in assumed tank failure rates for the annual operational waste volume projections report.

Analysis of the data collected to determine the overall structural integrity of the DST system is also included within the scope of this WBS. The RPP baseline schedule includes Technology Insertion Point milestone T03-05-300 (due April 2005) to assess the need for DST replacement. In addition to the data collected by visual and ultrasonic examinations, evaluations will also consider design standards, waste characteristics, and compatibility with tank materials, corrosion protection, and tank age. This assessment will consider waste volume projections, DST-specific waste storage demands based on alternative waste retrieval scenarios, improved estimates of tank life expectancy, and engineering studies on the costs and benefits of providing additional waste storage capacity.

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DST Chemical and Corrosion Probe surveillance scope of work within this element of the WBS is to develop and implement a DST Chemistry Surveillance program to periodically sample and analyze wastes with a propensity to consume hydroxide (i.e., those containing high organic concentrations, dilute waste mixtures and waste heels). A technical safety requirement administrative control procedure will be developed to implement a chemistry control program to replace the existing operational specification document (OSD) chemistry limits.

1.01.01.02.05 DOUBLE-SHELL TANK FACILITY UPGRADES

The scope of work within this element of the WBS includes activities required for project management of DST life extension: project, planning, maintenance and upgrade projects, administration, infrastructure support and essential services. The focus of this WBS is to ensure safe and efficient project execution and delivery. Scope also includes activities required for project integration of life extension: planning and maintenance program upgrades, upgrade projects, implementation of technical standards and administration of Tank Farm equipment labeling. The focus of this WBS is to provide baseline management, project execution and delivery, planning and scheduling, project performance.

DST upgrades projects includes activities required for improved safety, operating efficiency and compliance of structures, systems and components to meet DST mission needs. The focus of the element is to ensure long-term viability of the DST system. The major elements of this WBS include Design, Planning, Procurement, Installation and Closeout.

1.01.02.02.02 CONSTRUCT DOUBLE-SHELL TANKS TRANSFER SYSTEM – PROJECT W-314

The scope of work within this WBS element includes the "Other Project Costs" (OPC) or non-capital activities required to support completion of Line Item Project 97-D-402 "Tank Farm Restoration and Safe Operations" (W-314). Project W-314 upgrades are to ensure compliance with, or provide improvement in, meeting regulatory, safety, authorization basis, mission needs, conduct of operations, and/or privatization requirements. The scope of these upgrades includes: 244-S DCRT, Master Pump Shut Down systems, and DST tank farms (AN, AP, AY, AZ, AW and SY).

The scope of work within this WBS element includes activities required to upgrade DST farms and facilities to provide complaint waste transfer capabilities to support retrieval operations. These upgrades are to ensure compliance with, or provide improvement in, meeting regulatory, safety, authorization basis, mission needs, conduct of operations, and/or privatization requirements. The scope of the upgrades includes: 244-S DCRT, Master Pump Shut Down systems, and DST tank farms (AN, AP, AY, AZ, AW and SY).

1.01.04.BE WASTE TREATMENT PLANT CONSTRUCTION

The scope of work within this element includes construction activities in support of Project 01-D-416, Waste Treatment and Immobilization Plant (WTP). The project's mission is to design, construct, and commission the WTP.

The Waste Treatment and Immobilization Plant Complex currently consists of five separate facilities: Pretreatment facility, Low Activity Waste Conditioning facility, Low Activity Waste Vitrification facility, High-Level Waste Vitrification facility, and the Balance of Facilities. The Pretreatment facility will separate the Hanford feed waste into low-level and high-level fractions. The high-level fraction is sent to the High-Level Waste Vitrification facility for immobilization. The low-level fraction is sent to the Low Activity Waste Conditioning facility for additional treatment prior to being immobilized in the Low Activity Waste vitrification facility. Office facilities, chemical storage, site utilities, and infrastructure are provided as part of the Balance of Facilities

1.01.03.01.02.02 INFRASTRUCTURE SERVICES – PHASE I

Initial Infrastructure provides the facilities and systems integrated with Hanford Site infrastructure to deliver the utilities/services needed for the Phase I mission. The work scope includes the design, construction and startup of needed Phase I utilities/services.

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Program management, administrative and engineering/technical support associated with ensuring that the Phase I WTP contractor's infrastructure requirements are met. The work scope includes:

- Develop programmatic deliverables (e.g., Risk determination/analysis, Monthly status, FY planning).
- Identify, maintain and ensure application of the administrative and technical requirements for providing utility and site services to the WTP.
- Manage the baseline work scope.
- Provide infrastructure deactivation, isolation and intrusion prevention for turnover to closure and declaration of property/asset excess.
- Provide integrated product and process development support (e.g., interface control documents).
- Manage and implement memorandums of agreement (MOA) and agreements in principle (AIP).
- Manage the installation of additional infrastructure upgrades, as directed by ORP.

Provide and fund utility and site services to the Phase I WTP contractor.

Fluor Hanford, Inc. (FH) operates facilities for interim storage and disposal of radioactive solid waste received from onsite and offsite generators. FH will transport and store or dispose of the radioactive solid waste that results from operation of the WTP. The radioactive solid waste includes low-level waste (LLW), mixed low-level waste (MLLW), transuranic (TRU) waste, and transuranic mixed (TRUM) waste. This WBS element provides for engineering and permitting support by FH to prepare for receiving, storing, and disposing of the WTP radioactive solid waste during operation of the WTP.

Fund the training of approximately 270 Hanford employees to serve as Phase I waste treatment plant employees/operators during hot-start and through production.

FH operates facilities to store, treat, and dispose of liquid effluents from other site cleanup projects. Non-radioactive, non-dangerous liquid effluents from the WTP are planned to be transferred to the 200 Area Treated Effluent Disposal Facility (TEDF) for disposal. Radioactive, dangerous liquid effluent from the WTP will be transferred to the Liquid Effluent Retention Facility (LERF) for interim storage, and subsequent treatment and disposal by the Effluent Treatment Facility (ETF). This WBS element provides for engineering and permitting support by FH to prepare for receiving the WTP liquid effluents

Program management, administrative and engineering/technical support associated with ensuring that the Phase II (Balance of Mission) contractor's infrastructure requirements are met.

The engineering and technical support associated with defining and analyzing operational functionality as well as preparing technical inputs to the Balance of Mission contractor's functional and physical interfaces control documents.

Phase I and II Infrastructure provides the site-integrated facilities/systems necessary for delivering utilities/services for the Waste Treatment/Immobilization mission. This WBS element includes all activities for the deactivation, decommissioning and closure of all Phase I and II infrastructure specifically installed for the Waste Treatment/Immobilization Plant and related facilities.

1.01.04.RE OFFICE OF SAFETY REGULATION

The Office of Safety Regulation ensures adequate safety through development of guidance, review and approval of the Waste Treatment Plant contractor's regulatory submittals, and execution of a comprehensive inspection program. The Office of Safety Regulation will continue through design, construction, operations, and deactivation of the Waste Treatment and Immobilization Plant.

1.01.03.A TREAT WASTE – SUPPORT TO ORP

This work scope includes: project support to provide specific expertise in project management, schedules, cost estimates, contingency and risk management, concept development, requirements analysis, and feasibility analysis.

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1.01.02.02.02 DST INITIAL TANK RETRIEVAL & WASTE FEED DELIVERY SYSTEM – PROJECT W-211 & W-521

This WBS element includes construction activities under Line Item Project 94-D-407. Subproject 01 Initial Tank Retrieval Systems (W-211) is required to modify ten (10) DSTs and associated tank farm infrastructure (i.e., pits and buildings) to enable retrieval and delivery of tank wastes to the waste treatment plant (WTP). These activities also include a transfer system from the AP Tank Farm to the WTP. Subproject 02 Waste Feed Delivery System (W-521) is required to modify eight (8) DSTs and associated tank farm infrastructure (i.e., pits and buildings) to enable retrieval and delivery of tank wastes to the WTP.

1.01.02.02.02.04 DOUBLE-SHELL TANKS RETRIEVAL

This WBS element includes activities required to modify three (3) DSTs and associated tank farm infrastructure (i.e., pits and buildings) to enable retrieval and delivery of tank wastes to the WTP.

1.01.02.02.05 ESSENTIAL SERVICES – DOUBLE-SHELL TANKS

The scope of this WBS element includes those activities necessary to upgrade DST farms and facilities to provide compliant waste transfer capabilities to support retrieval operations. Current identified scope covers the completion of the cross-site slurry transfer line including the following tasks required to prepare the cross-site slurry line for start-up and readiness activities. These activities include:

- Complete pre-start-up equipment status evaluation
- Ready system for operations
- Work package planning
- Disassemble pumps and replace the bearings
- Rebuild the mechanical seals
- Assemble pumps and test
- Complete pre-start-up maintenance

1.01.03.A RETRIEVE WASTE – SUPPORT TO ORP

This work scope includes: project support to provide specific expertise in project management, schedules, cost estimates, contingency and risk management, concept development, requirements analysis, and feasibility analysis.

1.01.04.01.01 IMMOBILIZED LOW ACTIVITY WASTE DISPOSAL FACILITY – PROJECT W-520

Work scope within this WBS element address the disposal of two general waste streams for Phase I and Phase II of the RPP vitrification project. They are: compliant immobilized low activity waste (ILAW) packages produced at the RPP-WTP and tested ILAW samples as laboratory waste. Transportation of ILAW packages from the WTP to the ILAW disposal facility, transport of the Department of Energy (DOE) ILAW certification samples for Phase I and Phase II of the RPP vitrification project from the WTP to the 222-S Laboratory for laboratory analysis, and operations for onsite disposal of ILAW packages and certification of samples for Phases I and II.

Work scope in this WBS provides for development of business-related planning documents including short and long-term strategic plans for the Dispose ILAW Project. These plans are basis for the budget and work authorization request from the DOE ORP/CHG. Included are activities to support monitoring and reporting of progress, maintenance of customer contact and support, and general guidance toward accomplishment of the project mission.

Also included is the development of the ILAW disposal system Performance Assessment in accordance with the low-level waste performance assessment requirements in DOE M 435.1-1, *Radioactive Waste Management*

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Manual. Geology, hydrology, and chemical evaluations will be performed and information will be factored into the facility design.

1.01.04.01.04 ESSENTIAL SERVICES TO DISPOSE IMMOBILIZED LOW ACTIVITY WASTE

The primary objective of this WBS element for failed melter disposal facility is to provide (1) An onsite waste trench for disposal of failed/used LAW and HLW melters from the WTP and (2) design and procurement of a transportation system to transport failed/used low activity waste (LAW) and high level waste (HLW) melters from the WTP to the failed melter disposal trench. Closure of ILAW disposal facility(ies) is covered in WBS element 1.05.03, Close RPP Facilities.

The primary objective of the Failed Melter Disposal (FMD) System is to provide (1) An onsite waste trench for disposal of failed/used LAW and HLW melters from the WTP and (2) design and procurement of a transportation system to transport failed/used LAW and HLW melters from the WTP to the failed melter disposal trench. Closure of ILAW disposal facility(ies) is covered in WBS element 1.05.03, Close RPP Facilities.

1.01.04.02.01 IMMOBILIZED HIGH LEVEL WASTE DISPOSAL FACILITY – PROJECT W-464

The primary objective of this WBS Element is to provide onsite interim storage for Phase I and Phase II IHLW canisters and prepare them for shipment to an offsite geological repository. The planning for receipt and interim storage of the immobilized high level waste (IHLW) canisters shall be in compliance with the WASRD and the EM-WAPS. Project W-464, Interim Storage Facility is a CSB Retrofit Subproject that addresses Phase I storage. The planning for receipt and interim storage of the IHLW canisters shall comply with the *Waste Acceptance System Requirements Document* and the *RW Waste Acceptance Preliminary Specifications*. This WBS covers transportation of IHLW canisters from the WTP to the interim storage facilities.

1.01.04.02.05 ESSENTIAL SERVICES TO STORE/PREPARE IMMOBILIZED HIGH LEVEL WASTE

Work scope in this WBS provides for development of business-related planning documents including short and long-term strategic plans for the Store IHLW Project. These plans are basis for the budget and work authorization request from the DOE ORP/CHG. Included are activities to support monitoring and reporting of progress, maintenance of customer contact and support, and general guidance toward accomplishment of the Project mission.

1.01.03.A DISPOSE WASTE – SUPPORT TO ORP

This work scope includes: project support to provide specific expertise in project management, schedules, cost estimates, contingency and risk management, concept development, requirements analysis, and feasibility analysis.

1.01.02.01.01 SINGLE-SHELL TANKS RETRIEVAL & TRANSFER SYSTEM DEVELOPMENT

The SST Retrieval Project Execution and Control activity involves:

- Development of SST Program Plan that provides the planning basis for all near term analyses, studies, and tests needed to develop the "Requirements Baseline".
- Focus on evaluation of tanks and tank farms at a resolution appropriate for decision making with respect to SST waste retrieval and tank farm closure.
- Develop a series of studies to evaluate the system performance improvements to be gained by deployment of various SST retrieval technologies.
- Development and application of the Retrieval Performance Evaluation (RPE) to establish risk-based criteria for defining retrieval system requirements and Leak Detection Monitoring and Mitigation (LDMM) system requirements.
- Development of RPE and Closure Data Quality Objectives (DQOs).
- Identification and assessment of actions necessary to increase compliant tank space for SST waste.

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- Submittal of tank farm closure work plan updates which includes waste retrieval, operable units characterization, and technologies development to support closure, regulatory pathway and strategy for achieving closure.
- Provide program, project management and strategic direction for SST Closure Project.
- Provide technical, cost, and schedule guidance for the program.
- Provide project controls functions necessary to budget, obtain funding, and track and report expenditures.
- Develop and maintain, including configuration management, of all supporting documentation for the Multi-year Work Plan (MYWP) and for the Project Baseline Summary (PBS) updates.

The scope of "Technology Development" activities covered under this WBS element fall into five major areas, including: 1) Retrieval Technology Development; 2) Leak Detection, Monitoring, and Mitigation Technology Development; 3) Sampling and Characterization Technology Development; 4) Facility Inspection Technology Development; and 5) Tank Farm Closure Technology Development.

The SST Retrieval Demonstration activity involves three integrated elements (cold testing, hot testing specifications and deployment decisions), and retrieval demonstrations that will provide data in support of future retrieval decisions, as developed by the Retrieval System Selection Alternatives Generation Analysis.

The Facilities activity involves the design, construction, and start-up of a Cold Test, Training and Mockup (CTTM) Facility that will provide a test arena for: 1) proof-of-principle and development testing of tank retrieval systems in simulated tank wastes conditions; 2) development and refinement of retrieval system installation/operation and removal processes; 3) training of personnel, development of procedures and testing of equipment; and 4) demonstration tests to certify retrieval systems and qualify equipment operators.

The A, AX, B, BX, BY, C, S, SX, T, TX, TY, and U Tank Farms Waste Receiver Facility activities include all work necessary, design (conceptual and detailed), project validation, procurement, and construction upgrades, to develop the DST system to serve as a Waste Receiver Facility (WRF). The selected DSTs will serve as a WRF for retrieval of waste from the A, and AX farms. This WRF will be capable of functioning as a waste accumulation, settling, blending and conditioning structure. In addition to the identified above, the scope includes all necessary upgrades to the DST facility, internal equipment as well as associated transfer lines up to the SST tank farm boundary. The piping shall be designed to allow tie-in to the piping from the tank farms. The facilities, associated equipment, piping, and instrumentation are to be procured and installed or constructed, and tested to ensure proper operation.

1.01.02.01.02 CONSTRUCT SINGLE-SHELL TANK RETRIEVAL SYSTEM

The Construct SST tank retrieval system activities consist of the design, procurement, construction, readiness assessments, start-up, and turnover to Operations of waste retrieval systems for Tank Farms: 241-A, 241-AX, 241-B, 241-BX, 241-BY, 241-C, 241-S, 241-SX, 241-T, 241-TX, 241-TY, and 241-U. The new systems will: 1) retrieve waste from 241-A Tank Farm single-shell tanks (SSTs), 2) convey the waste to and from a waste transfer system or waste receiving facility for transfer to double-shell tanks (DSTs) designated to receive the waste, 3) meet applicable regulatory requirements, and 4) reduce the waste inventory in the SST system, and 5) support waste feed delivery to the waste immobilization (vitrification) plant

The Construct MUST/IMUST Farm Retrieval System activities involve the design, construction, and acceptance testing activities to be performed prior to turnover to the tank farm operating contractor. These activities will provide retrieval & transfer systems to deliver waste from active or inactive miscellaneous underground storage tanks (MUST/IMUST), which don't have an existing capability and/or infrastructure to move waste to the double-shell tank (DST) system. The MUST/IMUST waste will be processed during Phase 2 of waste treatment & disposal activities.

1.01.02.02.01 DOUBLE-SHELL TANK RETRIEVAL & TRANSFER SYSTEMS DEVELOPMENT

The scope of this WBS element includes program planning and execution for DST/Waste Feed Delivery (WFD) technology integration, long-term mission strategies, project definition for new DST/WFD capital projects, trade studies and process improvements. This work scope will include:

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- Input and coordination with EM-50 Tank Focus Area for technology need definition and coordination of technology insertion points
- Preliminary development of the Cold Test Training and Mock-up Facility
- Integration of SST retrieval plans with DST/WFD
- Assessments for process improvements
- Trade studies and alternatives analysis

This WBS element provides all multi-farm activities necessary to manage and train the Retrieval Operations staff. This WBS element does not provide activities that are conducted to support a specific tank farm or small group of tank farms. Specific activities within the scope of this WBS element are:

- Operations program management, associated activities, and general administrative support
- Review work to be performed in the facilities to ensure that no conflict will occur between activities and provide input to the DST integrated schedule
- Radiation Control, associated activities, and general administrative support
- Engineering, associated activities, and general administrative support
- Quality Assurance, associated activities, and general administrative support
- Safety and Health, associated activities, and general administrative support
- Environmental, associated activities, and general administrative support including environmental permitting, reporting, records management, and hazardous materials coordination.
- Management, development, maintenance, and conduct of training.
- Support for non-farm-specific external assessments, performance indicator reporting, and communications
- Corrective Actions Management Support
- Perform integrated system testing of the WFD System
- Provide input to the waste volume projections within the DST system

This WBS element provides all activities necessary to establish routes, mix, and transfer waste from Tank Farms 241-AN, 241-AP, 241-AW, 241-AY, 241-AZ, 241-SY to the WTP.

1.01.05.01.01.04 VADOSE ZONE MONITORING

This WBS element provides all necessary activities required to manage, develop and implement groundwater and vadose zone monitoring programs for the SSTs, miscellaneous underground storage tanks, peripheral systems, facilities, and SST farms, collectively referred to as SST Farms, in accordance with the applicable regulations and approved plans for the SST Farms.

1.01.05.03 CLOSE RIVER PROTECTION PROJECT FACILITIES

This WBS element provides necessary activities to close tank farm ancillary support structures and equipment, systems, components, and contaminated soils located outside of tank farm boundaries. This WBS element provides activities to develop, negotiate, and document closure strategies, and to implement those strategies.

After filling ILAW disposal facilities and completion of interim storage of IHLW, Resource Conservation Recovery Act 1976 (RCRA) and DOE Order 5820.2A require closure of facilities in a manner that protects public health and safety. This activity will deactivate operations support systems, and place closure covers over the disposal facilities. Cranes and support buildings will be dismantled and the storage and disposal sites returned to a natural contour. The closure will be consistent with closure plans developed for RCRA permits and the ILAW Performance Assessment. Closure activities will include:

- Deactivation and demolition of operations support systems and structures
- Construction of final disposal site closure cap
- Re-vegetation of the disposal site and sagebrush mitigation areas
- Perform long-term post-closure monitoring

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1.01.02.02.03.02 TANK FARM WASTE FEED DELIVERY UPGRADES – PROJECT W-525

The scope of work within this WBS element includes activities required to upgrade DST facilities to provide compliant waste transfer capabilities in support of Safe Storage Operations and ultimately, Retrieval and Waste Feed Delivery. The scope of this project includes two basic types of actions: Upgrades to facilities, equipment, and transfer lines to meet compliance requirements with applicable regulations which, are needed but not currently within the scope of existing projects, and isolation (stabilization, isolation, and monitoring as required) of equipment and transfer lines which are being taken out of service. The portion of scope of this project addressing upgrades includes three primary areas: Upgrades to piping, Clean-out Boxes (COBs), and ventilation systems equipment.

**Office of River Protection
Fiscal Year 2003 Work Scope Descriptions
by PBS/WBS (Proposed Structure)**

Store Waste – ORP-TW03 (\$142,342,000)

DST Capacity & Inventory Management

- Develop/Adjust/Maintain current TSB WIRD
- Maintain Characterization Data & Tank Characterization Reports
- Characterization Equipment Engineering including/mobile variable depth sampler
- Revise/Disposition 6 WTP Study Residue/Job Ctrl Sample Shipments
- Acquire 11 one-Liter Grab Samples
- Acquire 3 five-Liter Grab Samples
- Acquire 3 two-Liter Grab Samples
- Complete 14 Grab Sample Analysis
- Provide 16 Grab Data Reports
- Acquire 2 Core Samples
- Provide 4 Core Sample Analysis
- Provide 1 Core Data Report
- Update / Maintain Operational Waste Volume Projection
- Perform 10 Tank to Tank transfers in support of evaporator campaign

DST Tank Integrity

- Life Cycle Integrity Assessment Equipment & Professional Engineering Services, DST & Piping Videos
- Resolve AN Farm Tanks Corrosion Issues (Probes, Cathodic Prot, etc)
- Resolve 200-E Ancillary Facility Corrosion Issues
- Resolve AP Farm Tanks Corrosion Issues (AP-103, 104, 107 Low pH)
- Start resolution of AW Farm Tanks Corrosion Issues
- Start resolution of SY Farm Tanks Corrosion Issues
- Perform Ultrasonic Testing in AP-101, AP-102, AW-102, AW-104

DST Facility

- Complete Replacement of failed Double Encased Transfer Line AN-101/105
- Perform AN Farms Technical Baseline System Analysis
- Perform AP Farms Technical Baseline System Analysis
- Perform AW Farms Technical Baseline System Analysis
- Perform AY/AZ Farms Technical Baseline System Analysis
- Start Implement AN Farm Technical Baseline Upgrades/Modifications
- Perform 13 A350 Catch Tank to AW-102 transfers
- Receive K Basin Transfers into AW-105
- Remove Abandoned/Excess Equipment from AW Farm
- Remove Abandoned/Excess Equipment from AY/AZ Farms

- Perform SY Farms Technical Baseline System Analysis
- Perform 2 SY-102 to AP-107 Transfers
- Perf 26 151-AZ Catch Tk to 102-AZ transfers
- Perform 244-A and 244-BX pumping
- Install Over Ground Transfer (OGT) line if existing route fails
- Perform cross-site trans SY-102 to AP-107
- Complete 242A Evaporator Campaign 03-2
- Install ENRAFs in ER-311
- Connect TMAcs to ER-311
- Install Raw Water Flow Totalizers for AN Farm, AP Farm, and AZ Farm

SST Facility

- A/AX Technical Baseline, Identify SSCs & Issue RAM Analysis
- B/BX/BY Technical Baseline, Identify SSCs & Issue RAM Analysis
- C Farm Technical Baseline Identify SSCs & Issue RAM Analysis
- Remove Excess Equip A/AX farms
- Remove Excess Equip B/BX/BY farms
- Remove 1 Inactive System in 242-S
- Perform 200W Ancillary Facilities Technical Baseline System Analysis
- Resolve 200-W Ancillary Facility Corrosion Issues
- Perform S/SX Farms Technical Baseline System Analysis
- Perform T/TX Farms Tech Baseline System Analysis
- Perform U Farm Technical Baseline System Analysis
- Complete removal of abandoned/excess equipment S/SX
- Remove Abandoned/Excess Equipment U farm
- Install ENRAF's in C-111, C-201, C-202, C-203, C-204, U-101, U-104, U-112, U-201, U-202, U-203, U-204
- Connect TMAcs to C-111, C-201, C-202, C-203, C-204, U-101, U-102, U-104, U-108, U-110, U-111, U-112, U-201, U-202, U-203, U-204
- Upgrade Stack Monitoring Systems (W-420)
- Reduce the contamination zones in A/AX Farms

SST Interim Stabilization

- Start Interim Stabilization of 5 SSTs (U-111, S-109, S-112, S-101, S-107)
- Reduce Total Liquids to 2% of total volume SSTs
- Interim Isolation of 12 Tanks (C-103, C-105, C-106, U-112, AX-101, SX-101, SX-105, U-102, U-103, U-105, U-106, U-109)
- Complete pumping of 15 Tanks (A-101, AX-101, BY-105, BY-106, C-103, S-101, S-107, S-111, S-112, SX-102, SX-103, SX-105, U-107, U-108, U-111)

Tank Safety

- Collect/Analyze SST & DST Flammable Gas Data & Maintain Data Base
- Maintain USQ Process
- Authorization Basis Maintenance, Update / Upgrades

Retrieve Waste – ORP-TW04 (\$147,790,000)

Initial Quantity

- Trade Studies, Definition & Scope AW Farm Repairs/Upgrades
- Design/Install Central Control Room / Shift Office
- Perform 6 Dilution Tests
- Perform 1 Rheology Test
- Develop W-525 CDR & Design
- W-211 / Initiate AN-103 Design
- W-211 / Complete AN-107 Design
- W-211 / Complete AN-102 Design
- W-211 / Complete AZ-101 Procurement
- W-211 / Continue AZ-101 Construction
- W-211 / Continue AZ-102 Procurement
- Complete Procurement of Equip for AP-101 Pump Replacement
- W-521 / Initiate Const. TFC/WTP Transfer Sys
- W-521 / Continue Const AP Valve Pit Upgrades
- Accomplish 222-S Lab upgrades for Phase 1
- Define Requirements & Initiate Construction/Modification for Spare Equipment Storage Facility
- Implement PM/CM Waste Feed Delivery Systems
- LAW Readiness Mgmt Assessment POA & Readiness Plan
- Maintain the Operations and Utilization Plan
- Maintain ICD's 19 & 20 and Manage WTP Interface
- Continue Repair / Upgrade of existing AZ system required for Phase 1
- Start Completion of the Cross Site Slurry Line
- W-314 Perform MSA for Master Pump Shutdown System
- W-314 Ph 2 Complete Construction AN Farm Upgrades
- W-314 Ph 2 Complete Startup & Test AN Farm Upgrades
- W-314 Ph 2 Complete Management Self Assessment & Readiness Assessment AN Farm Upgrades
- W-314 Ph 1 Complete AN-101/4 Upgrades
- W-314 Ph 2 Construct AP Farm Upgrades
- W-314 Ph 2 Startup & Test AP Farm Upgrades
- W-314 Ph 2 Perform Management Self Assessment & Readiness Assessment AP Farm Upgrades
- W-314 Ph 2 Complete Design SY Farm Upgrades
- W-314 Ph 2 Initiate Construction SY Farm Upgrades
- W-314 Ph 2 Initiate Startup & Test SY Farm Upgrades
- W-314 Ph 2 Design East/West Transfer Line
- W-314 Ph 1 Complete Startup & Test AW Farm upgrades
- W-314 Ph 1 Complete AZ Farm Upgrades Startup & Test
- WFD Technology Insertion Support
- WFD Program Technical Analysis

Balance of Mission (BOM)

SST Project

- Provide Final Comparison Report LDMM Technical Assessment
- Assess C-107 Conditions
- M-45-02C Submit annual update SST Retrieval Sequence Document
- M-45-05D Establish Completion Date for 2nd Waste Retrieval
- Revise & Issue SST Retrieval FSAR & TSRs
- ORP-07-1 Cold Test Facility acquired/testing initiated
- S-112 Saltcake retrieval F&R Document submitted & design complete
- S-102 Fluidic Mixer Conceptual Engineering complete and Functions & Requirements Document submitted
- S-102 retrieval equip/sys procurement contract award
- W-523 Prepare Project Technical Baseline Document C-104 & rebid C-104 Contract
- W-523 C-104 Perform Conceptual Design & validate project
- Initiate S-106 Pre-Conceptual Design

Treat Waste – ORP-TW06 (\$905,776,000)

Waste Treatment Plant

- Continue development of electrical component specifications
- Continue Ion Exchange Testing for radionuclides removal
- Continue preparation of procurement specifications for piping fabrication, Heating, Ventilation, and Air Conditioning systems, stainless steel liner plate, roofing and siding, rebar and embeds.
- Continue procurement of electrical equipment, fabrication of tanks and vessels, wall boxes and cabinets.
- Continuation of Instrumentation and Control Design.
- Continue civil and structural detail drawings.
- Low Activity Waste Facility construction starts.
- Pretreatment Facility construction starts.
- High-Level Waste Facility construction starts.
- Continue performance testing of the canister design.
- Continue primary and secondary Off Gas System Development.
- Continue preparation of the Piping and Instrumentation Drawings.
- Continue preparation of Control System Drawings.
- Continue preparation of Piping Support Drawing.
- Continue development of the Mechanical Equipment Specifications.
- Continue small scale testing of the vitrification processes.
- Continue regulatory permitting activities.
- Continue Land Disposal Requirement Petitions.
- Continue fabrication of other mechanical equipment.
- Continue Pretreatment process testing of unit operations.
- Continue development testing of unit operations.
- Continue construction of underground utilities.
- Continue construction of site facilities (steam, water, electrical).

Infrastructure Services – Phase I

- Prepare Infrastructure Phase II Conceptual Design
- Replace 242A Evaporator Condenser
- Perform Eng Studies 242A Evaporator Life Extension Upgrades

**Dispose Waste – ORP-TW09 (\$16,723,000) and
ORP-PED (\$9,144,000)**

Immobilized Low Activity Waste (ILAW)

- Prepare ILAW Melter Disposal Level 1 Specification
- Prepare ILAW Sample Transportation Procurement Specification & SARP
- ILAW Melter Transport Sys Program Support
- Continue Data Collection for Performance Assessment
- W-520 Preliminary Design
- W-520 Initiate Procurement
- W-520 Continue Permit Application
- W-520 Prepare SARP & Initiate Preparation of PSAR

Immobilized High-Level Waste (IHLW)

- Prepare IHLW Melter Disposal Level 1 Specification
- Prepare IHLW Sample Trans Procurement Specification & SARP
- Revalidate W-464
- Initiate W-464 Design
- Initiate W-464 Procurement
- Select AE W-464

Manage Project – ORP-TW10 (\$121,484,000)

- Provide Executive Management and General Project Management Support
- Establish/Maintain Regulatory Compliance for TWRS Facilities & Farms
- Update TWRS ISMS Plan
- Provide ESH&Q Program Support and General Management
 - Implement the Suspect Parts Mitigation Compliance
 - Conduct annual Fire Hazards Analysis Implementation
 - Provide Waste Acceptance Program
 - Implement Price Anderson Act Administration Program
 - Conduct ESH&Q / Radcon Compliance Assessments
- Support Regulatory & Stakeholder Affairs
- Maintain TWRS Standards/Requirements Identification Document (S/RID)
- Develop and Implement TSCA-PCB Compliance Program
- Communication / Public Involvement
- TPA Administration Records Support
- Strategic Planning

- Provide Project Control Support, Financial Control, Integration and Reporting
- Manage & Direct Configuration Management Implementation
- Administration of Change Control
- Risk Analysis/Assessment
- Provide procedures, Systems Engineering, & CM
- IRM Program Management, Document control & records management system
- Requirements Management
- Human Resources
- General Counsel
- Community Relations & Communications
- Support Regulatory & Stakeholder Affairs
- Contracts Administration
- Facilities & Materials

Close Facilities – ORP-TW11 (\$17,788,000)

Close Facilities

- Manage Vadose Zone / Closure Program
- Initiate 244CR Vault Stabilization
- Initiate 244AR Vault Stabilization
- Deactivate 35 Inactive Miscellaneous Underground Storage Tanks (IMUSTs)

Vadose Zone

- M-45-55-T02 Submit to Ecology FIR B-BX-BY
- Initiate Characterization of Waste Mgmt Area T/TX/TY
- Initiate Characterization of Waste Mgmt Area U

Safety Regulation – ORP-RG01 (\$4,179,000)

- Issue Openness Plan Revision
- Issue Construction Authorization Agreement
- Issue Preliminary Safety Evaluation Report
- Issue Evaluation Report / Approve Standards Approval Package

TOTAL FY 2003 FULL REQUIREMENTS REQUEST \$1,365,226,000

OFFICE OF RIVER PROTECTION

**FY 2003 CROSSWALK BETWEEN
IPABS DATA ENTRY AND REQUESTED PBS STRUCTURE**

(dollars in thousands)

PBS Number		Old PBS Title/Proposed PBS Title	FY 2003	
IPABS Data Entry	Proposed Structure		Target Level	Full Requirements Request
TW03	TW03	Tank Farms Operations/Store Waste	113,491	142,342
TW04	TW04	Waste Retrieval, Storage & Disposal Operations/Retrieve Waste	64,319	82,601
TW04	TW11	Close Facilities	221	17,788
TW12	TW04	94-D-407 Initial Tank Retrieval Systems (W-211/W-521) (OE)	2,519	2,625
TW12	TW04	94-D-407 Initial Tank Retrieval Systems (W-211/W-521) (LI)	20,861	26,300
TW12	TW04	97-D-402 Tank Farm Restoration & Safe Operations (W-314) (OE)	448	4,339
TW12	TW04	97-D-402 Tank Farm Restoration & Safe Operations (W-314) (LI)	4,568	31,925
TW06LT	TW06	Waste Treatment & Immobilization Plant Construction/Treat Waste	7,545	7,576
TW06LT	TW06	01-D-416 Waste Treatment and Immobilization Plant (LI)	500,000	898,200
TW09	TW09	Immobilized Tank Waste Storage & Disposal Project/Dispose Waste	5,876	5,876
TW09	TW09	01-D-414 Immobilized High-Level Waste Interim Storage (W-464) (OE)	889	1,714
TW09	TW09	01-D-414 Immobilized High-Level Waste Interim Storage (W-464) (LI)	0	7,990
TW09	TW09	01-D-414 Immobilized High-Level Waste Interim Storage (W-520)	0	1,143
TW10	TW10	Management Support/Manage Project	83,458	121,484
ORP-PED	ORP-PED	01-D-414 Immobilized High-Level Waste Interim Storage (W-464)	3,138	5,120
ORP-PED	ORP-PED	01-D-414 Immobilized High-Level Waste Interim Storage (W-520)	3,134	4,024
RG01	RG01	TWRS Regulatory Unit/Safety Regulation	4,001	4,179
		TOTAL	814,468	1,365,226



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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May 14, 2001

Mr. Harry L. Boston, Manager
Office of River Protection
U. S. Department of Energy
P. O. Box 450
Richland, WA 99352

Mr. Keith A. Klein, Manager
Richland Operations Office
U. S. Department of Energy
P. O. Box 550
Richland, WA 99352

Dear Messrs. Boston and Klein:

RE: Hanford Federal Facility Agreement and Consent Order (HFFACO) requirements governing the provision of budget information and coordination between the Parties during the development and allocation of yearly site-wide budgets^{1, 2, 3, 4}.

This letter follows federal fiscal year 2002 and 2003 budget briefings you and your staff provided Ecology and EPA on May 3, 2001. We understood these briefings were to be provided in accordance with the requirements of Hanford Federal Facility Agreement and Consent Order (HFFACO) paragraphs 148 and 149.

As you know, Ecology's ability to meet our own responsibilities under paragraphs 148 & 149 depends upon our timely receipt of adequately detailed information that identifies compliance workscope that would and would not be supported by various budget cases. This information must allow the evaluation of expected budget impacts on Energy's ability to meet (all) HFFACO

¹ Letter (ORC-158), March 28, 2001: Chuck Findley, Acting Regional Administrator, U. S. Environmental Protection Agency Region 10 and Tom Fitzsimmons, Director, Washington Department of Ecology to Harry L. Boston, Manager, Office of River Protection and Keith A. Klein, Manager Richland Operations Office, U. S. Department of Energy, Richland Washington.

² Letter (01-RCA-247), April 9, 2001: Clifford E. Clark, Acting Program Manager, Office of Regulatory Liaison, U. S. Department of Energy, Richland Field Office to Douglas R. Sherwood, Hanford Project Manager, U. S. Environmental Protection Agency Region 10 and Michael A. Wilson, Manager, Nuclear Waste Program, Washington Department of Ecology.

³ Letter (01-AMI-011), April 18, 2001: Harry L. Boston, Manager, Office of River Protection and Keith A. Klein, Manager Richland Operations Office, U. S. Department of Energy, Richland, Washington to Tom Fitzsimmons, Director, Washington Department of Ecology and Chuck Findley, Acting Regional Administrator, U. S. Environmental Protection Agency Region 10.

⁴ Letter, April 24, 2001: Mike Wilson, Manager, Nuclear Waste Program, Washington Department of Ecology, and Doug Sherwood, Hanford Project Manager, U. S. Environmental Protection Agency Region 10, to Harry L. Boston, Manager, Office of River Protection and Keith A. Klein, Manager Richland Operations Office, U. S. Department of Energy, Richland Washington.

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Messrs. Boston and Klein
May 14, 2001

requirements whether near term or outyear. We were consequently disappointed that the information we received contained little detail and did not identify "compliance case" information needed for us to identify impacts and to assist us in making informed decisions and recommendations. The Richland Field Office briefing also did not provide information quantifying near term impacts or documenting the extent to which outyear HFFACO requirements would be impacted or supported. As a result, our response to you today is unavoidably more general than in past years.

The President's proposed FY2002 budget and "flat funding" in FY2003 would result in unprecedented delays or cancellation of a wide range of Hanford compliance projects. My basic message to you today is that Ecology will not accept the wholesale dismantlement of projects that in many cases have been established through years of thoughtful and responsible development. As you each know, these projects have been prioritized based on contaminant presence and mobility, project interdependencies, and the values of Washington State and other Hanford stakeholders. Unless Hanford's FY2002 budget and Energy's developing FY2003 request undergo major modifications, Ecology will have little choice but to use any and all means at our disposal to enforce Hanford cleanup commitments.

**Comments regarding proposed and developing
Office of River Protection budgets.**

Ecology's highest priority at Hanford has been and continues to be the safe and timely retrieval and vitrification of Energy's Single-Shell, and Double-Shell tank wastes. The information provided us at our May 3 briefing is inadequate for us to comment in any detail. However, I offer the following comments for Energy's consideration pursuant to HFFACO paragraphs 148 and 149.

First, Ecology will not accept workscope reductions that nullify HFFACO requirements for initial Single-Shell tank waste retrieval. As you know, this program is far behind schedule, has only recently been renegotiated, and is aimed at the very core of our responsibilities for the protection of human health and the environment-- that being the timely retrieval of wastes from Hanford's failing tanks.

Second, Ecology cannot accept the delays to Waste Treatment Plant (WTP) acquisition that would apparently result from the President's FY2002 budget proposal and FY2003 flat funding. We were surprised that even at ORP's preliminary request level, Energy estimates that start of WTP construction in FY2002 would be "difficult to perform" at best. Furthermore, it appears that neither the President's FY2002 budget request nor Energy's developing FY 2003 flat funding case support start of WTP hot commissioning by December 2007. At flat funding, Energy apparently would have to delay the start of hot commissioning from three to four years. Similar delays to outyear requirements including completion of commissioning would also be expected. Our May 3 briefing also indicated that neither scenario would support work necessary to provide timely waste feed.

Ecology is also concerned that the President's FY2002 proposed budget and FY2003 flat funding would negatively impact tank farm upgrades, vadose zone characterization, and "RCRA wells". Adequate monitoring of groundwaters in the vicinity of the tank farms, and the identification of the nature and extent of contaminant plumes is absolutely necessary to protect human health and

Messrs. Boston and Klein
May 14, 2001

the environment. Both federal and state laws require adequate monitoring and the evaluation of contaminant releases. Compliance with these requirements is not discretionary.

We were also disappointed that long-needed upgrades to the 242-A evaporator would not be supported by the President's FY2002 budget or at FY2003 flat funding. Though the HFFACO does not specifically require these upgrades, the evaporator serves an essential function and failure would cause widespread delays throughout the tank farms. Not funding the maintenance and upgrade of this critical facility is simply not wise.

In summary, the President's FY2002 budget proposal and flat funding in FY2003 would deal a major blow to the cleanup of Hanford tank wastes. We have given careful thought as to whether or not some areas of ORP work could be deferred or deleted in order to cut costs, while preserving the overall integrity of the cleanup process. We have not identified unwarranted workscope, and urge you to continue to advocate full funding in FY2002 (1.0703B), and FY2003 funding at a level which will maintain Energy compliance with HFFACO requirements.

**Comments regarding proposed and developing
Richland Field Office budgets.**

The Richland Field Office provided Ecology even less information than ORP. As a result, we are unable to adequately identify projected and potential impacts to Energy's ability to comply with HFFACO terms (whether near term or outyear) or to make informed recommendations on priorities or potential adjustments. Nonetheless, I offer the following comments for Energy's consideration pursuant to HFFACO paragraphs 148 and 149.

First, we are disappointed at the lack of evident support for Energy's "2012 initiative". As you know, despite the fact that this initiative would require significant modification of HFFACO requirements, the details of which Energy has yet to provide, Ecology has been willing to consider this initiative. We understand that the 2012 initiative was intended to establish innovative and efficient working relationships with Hanford contractors and to challenge them to produce expedited results while not sacrificing quality of product. It is disappointing to say the least to see this initiative apparently unfunded.

We appreciate that the President's FY2002 budget and Energy's FY2003 budget cases fully support the K basins spent nuclear fuel project and the stabilization of wastes and materials at the Plutonium Finishing Plant. These projects are not only of importance to Ecology and EPA, but are also of high priority to the Defense Nuclear Facilities Safety Board (DNFSB).

Beyond these few projects however, it appears that under the President's proposed FY2002 and Energy's developing FY2003 budgets, Richland Field Office work would be gutted. Based on the scant information provided us it appears that these budgets could bring Hanford site remedial action (such as cleanup along the Columbia River and associated RI/FS work) to a virtual standstill; halt the safe interim storage of Hanford's old reactors; end focused risk reduction at Energy's 324/327 facilities; and essentially zero out waste management activities that focus on the management of Hanford's huge quantities of Transuranic waste (including work at Energy's Waste Repackaging and Processing (WRAP) facility).

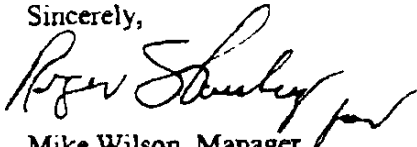
Messrs. Boston and Klein
May 14, 2001

We are particularly concerned that liquid effluent treatment facilities, groundwater pump and treat projects, and groundwater monitoring programs continue to be funded. These compliance activities have been specifically designed to identify mobile contaminants in the Hanford environment, to track their movement, and in the case of pump and treat operations, to remove them for treatment. We view these projects as essential measures if we are to adequately protect human health and the environment from the effects of Hanford contaminants. I urge you to ensure their continued full support.

As we discussed during Energy's May 3, 2001 briefings, we would appreciate receiving full copies of your FY2003 budget submittal when provided to your Headquarters.

We trust that you will make every effort to resolve the issues we have raised, and that you will forward our comments along with notations regarding any unresolved issues as required by the HFFACO. I also recommend that public and regulatory agency comments received during recent budget hearings be included within your FY2003 budget request. As you know, incorporating agency and public concerns during the budget development process has proved both useful and widely acclaimed in recent years.

Sincerely,



Mike Wilson, Manager
Nuclear Waste Program

- c. Dave Bartus, EPA Region 10
- Mary Lou Blazek, OOE
- Russell Jim, YIN
- Todd Martin, HAB
- Doug Sherwood, EPA Region 10
- Joe Richards, CTUIR
- Pat Sobotta, NPT
- Colleen Warren, WA AGO
- Administrative Record

Summary of Key Assumptions and Workscope for Budget Case Analysis

Case	Description	Waste Treatment and Immobilization Plant	Balance of Project
Case 1A	Funding level equal with the FY 2002 President's Budget	\$500 million	\$314 million
Case 1B	Prioritized by Risk at a funding level equal to the FY 2002 President's Budget	\$500 million	\$314 million
Case 2	Funding level equal to the FY 2001 appropriation	\$377 million	\$380 million
Case 3	Full requirements case	\$898 million	\$466 million

Impacts of the Requested Case to the River Protection Project for FY 2003

Case 1A

This case funds the operations and maintenance of the single-shell and double shell tanks to ensure waste is safely stored, single-shell tank stabilization, and double-shell tank integrity testing. There would be some work on Tank Farm upgrades, there would be minimal progress towards single-shell tank retrieval demonstrations and vadose zone characterization, and no new RCRA wells would be installed.

The Waste Treatment and Immobilization Plant (WTP) would continue engineering and construction activities at approximately 65% of planned levels for the major facilities. Permitting and research and technology development would continue but also at a reduced level.

The Immobilized Low-Activity Disposal Facility and the Immobilized High-Level Waste Storage Facility design activities continue in support of the WTP. Design and construction activities for feed delivery to the WTP is maintained but at a reduced rate.

Case 1B

The risk-based scenario of Case 1B is identical to Case 1A, since Case 1A was analyzed considering worker and public safety and health by maintaining facility minimum safety and reducing significant safety risks while attempting to move forward with treatment of the high-level waste.

Case 2

ORP has not analyzed Case 2, however, the impacts would be worse than Case 1A corresponding to the lower funding level.

Case 3

This case is the funds required to support our legal commitments under the Hanford Federal Facility agreement and Consent Order, where technically achievable, and assuming the changes we have proposed to the TPA M-62 milestones associated with the WTP.

Summary of Public Comments Received Regarding the FY 2003 Budget

Public Meeting Were in Richland, Seattle, Hood River and Portland in March 2001

- Tank Waste Treatment is top priority, no more delays – Get on with cleanup
- The U.S. Department of Energy must meet its regulatory requirements
- Fully fund Tank Waste Treatment at Hanford
- No more waste should be sent to Hanford until tank waste is treated
- Protect the Columbia River and groundwater from future tank waste leaks

Carolyn L. Huntoon
01-BMA-035

JUN 01 2001

bcc: BMA Off File
BMA Rdg File
K. R. Ensign, BMA
J. L. Sands, BMA
P. L. Morehouse, BMA

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Office >	BMA <i>PLM</i>	BMA <i>K</i>	BMA <i>RE</i>	DEP	MGR	
Surname >	MOREHOUSE	SANDS	ENSIGN	ERICKSON	BOSTON	
Date >	5/21/01	6/1/01	6/1/01		6/1/01	

(Please return to Lorie Evanyk 3-9555 H6-60/2440 STVCN F 6-8532)

Document No. 27997